

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	214330	shutter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 08:18
S2	1911	shutter with vane	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:19
S3	3196531	angle angular	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:19
S4	364	S2 same S3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:20
S5	5375	250/221,201.5,237r,214p.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:13
S6	489	348/363,364.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:32
S7	0	"396"/\$7.ccls	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:32
S8	76828	"396"/\$7.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:32

## EAST Search History

S9	5	S4 and S5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:33
S10	1	S4 and S6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:33
S11	53	S4 and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 12:59
S12	2495	250/231.13,231.14,231.16,231.18. ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:45
S13	2	S4 and S12	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 11:33
S14	573582	photodiode photodetect\$3 photosens\$3 (photo adj3 (diode detect\$3 sens\$3)) (light adj3 (detect\$3 sens\$3 receiv\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 16:11
S15	102085	shutter with (position\$3 placement open\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:12
S16	17717	S14 and S15	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:12

## EAST Search History

S17	5249	shutter with (position\$3 placement open\$3) with (angle angular)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:45
S18	1026	S16 and S17	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:12
S19	8823	250/221,201.5,237r,214p,231.1-231.18.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:13
S20	31	S18 and S19	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:19
S21	845	352/208-220.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:14
S22	1871	396/493,495,246,463.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:14
S23	592	348/363,364,367,368.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:14
S24	15	S18 and S21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:14

## EAST Search History

S25	33	S18 and S22	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:14
S26	21	S18 and S23	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:14
S27	2404	(measur\$3 determin\$3 calculat\$3 assess\$3) with (shutter diaphragm iris) with (angular angle)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:22
S28	553	S17 and S27	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:22
S29	553	S15 and S28	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:54
S30	2	"5137346".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 13:55
S31	197	S14 and S29	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 16:32
S32	482	(shutter and (angle angular)).ti.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 16:38

## EAST Search History

S33	25	S32 and (encod\$3 S14)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 16:39
S34	2	"6850351".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 16:51
S35	21	("3434213"   "3735687"   "4057810"   "4301476"   "4398801"   "4408338"   "4515173"   "4536069"   "4571629"   "4576456"   "4581515"   "4616911"   "4743108"   "5159382"   "5255117"   "5539488"   "5850277"   "6305797"   "6663561").PN. OR ("6850351").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/08 16:51
S36	14	("3300271"   "4022525"   "4355279"   "4576456"   "4743108"   "4889424"   "5019773"   "5072162"   "5137346").PN. OR ("5850277").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/08 18:43
S37	2	"5137346".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 18:44
S38	2	"9008975"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 18:44
S39	21	"2947333"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 18:44
S40	845	352/208-220.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:08

## EAST Search History

S41	48	S40 and (S14 encod\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:04
S42	106	S17 and S40	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:09
S43	85	S42 not S41	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:23
S44	712	S40 not S42 not S41	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:44
S45	1871	396/493,495,246,463.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:45
S46	1825	S45 not S40	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:45
S47	10842	shutter with (angle angular)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:45
S48	192	S46 and S47	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:50

## EAST Search History

S49	592	348/363,364,367,368.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:50
S50	572	S49 not S45 not S40	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/08 19:50
S51	4005	encoder same (absolute with position\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 09:55
S52	2581	250/231.13-231.18.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 09:57
S53	251	S51 and S52	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 10:27
S54	48	S53 and "360"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 10:44
S55	54	S53 and reference and calibrat\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 10:58
S56	69	encod\$3 same (absolute with position) same (code\$1 with (disc disk)) and (reference with (mark position))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 12:44

## EAST Search History

S57	11	encod\$3 same (absolute with position) same (code\$1 with (disc disk)) and (reference with (mark position)) and (sine sin) and (cos cosine)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 12:35
S58	498	encod\$3 and (sine sin) and (cosine cos) and (arctan)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 12:49
S59	19	((disc disk) with encod\$3) and (sine sin) and (cosine cos) and (arctan)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 12:59
S60	2171	((disc disk) with encod\$3) and interpolat\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:06
S61	275	((disc disk) with encod\$3) and interpolat\$3 and (scan\$4 with frequency)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:03
S62	2581	250/231.13-231.18.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:00
S63	2	S61 and 7'	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:00
S64	2	S61 and S62	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:00



## EAST Search History

S65	70	S60 and S62	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:19
S66	122	S60 and shutter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:06
S67	52	shutter with (lock\$3) with scan\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:22
S68	91891	initialise	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/11 13:22
S69	8341	encoder and transformer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 11:41
S70	2	"5129725".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 10:51
S71	8341	encoder and transformer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:48
S72	332	S71 and shutter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 11:50

## EAST Search History

S73	137760	((direct with current) dc (d adj3 c)) with convert\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 11:51
S74	65	S72 and S73	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:13
S75	8189	(carrier with frequency) same (encod\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:44
S76	159	(carrier with frequency) same (encod\$3) same motor	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:44
S77	2584	250/231.13-231.18.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:45
S78	0	S76 and S77	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:48
S79	0	S71 and S78	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:48
S80	24	S71 and S77	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:48

## EAST Search History

S81	1164	encoder and (transformer same motor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:49
S82	4	S77 and S81	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/12 13:49